



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**VOLVO L60H 621807**  
Component  
**Diesel Engine**  
Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0003084</b>	ASC0003212	VCP426971
Sample Date		Client Info		<b>27 Feb 2024</b>	05 Jan 2024	08 Sep 2023
Machine Age	hrs	Client Info		<b>10013</b>	9550	8995
Oil Age	hrs	Client Info		<b>9550</b>	8995	0
Filter Age	hrs	Client Info		<b>9550</b>	8995	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>5</b>	8	6
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>7</b>	6	5
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

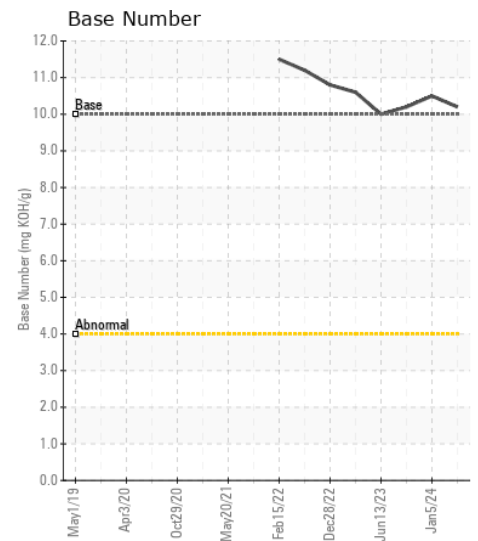
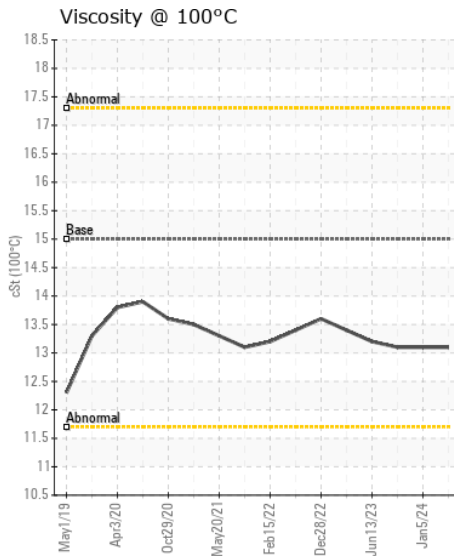
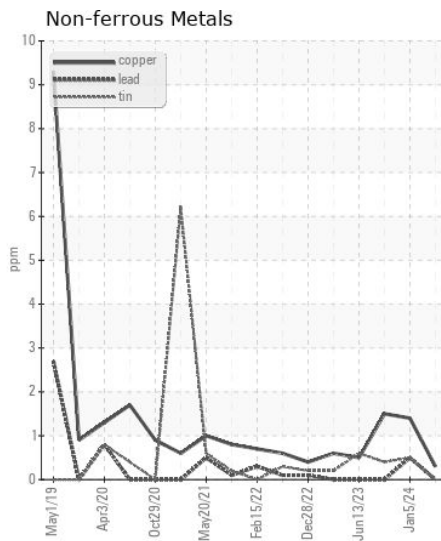
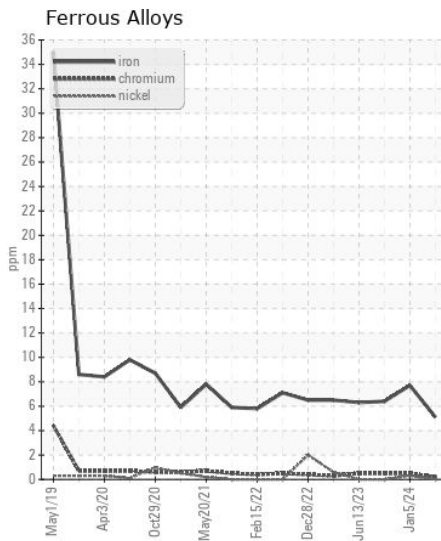
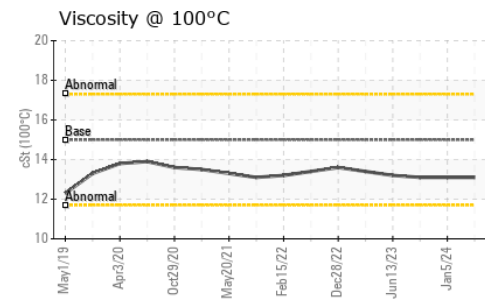
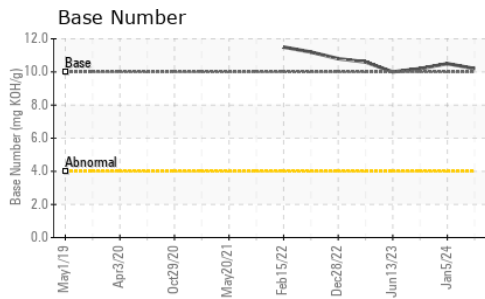
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	2
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.6</b>	6.9	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	21.9	21.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	3
Boron	ppm	ASTM D5185m	2.5	<b>46</b>	44	38
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	8	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>41</b>	44	42
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	256	<b>540</b>	530	565
Calcium	ppm	ASTM D5185m	2057	<b>1696</b>	1788	1814
Phosphorus	ppm	ASTM D5185m	935	<b>1005</b>	918	1005
Zinc	ppm	ASTM D5185m	1223	<b>1188</b>	1153	1267
Sulfur	ppm	ASTM D5185m	4079	<b>3023</b>	3163	3870
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.8</b>	20.0	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>10.2</b>	10.5	10.2
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.1</b>	13.1	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : ASC0003084

**Lab Number** : 06103610

**Unique Number** : 10901840

**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 28 Feb 2024

**Tested** : 29 Feb 2024

**Diagnosed** : 29 Feb 2024 - Wes Davis

**160 - ASCENDUM MACHINERY INC - MILLS RIVER**

215 FANNING FIELDS RD

MILLS RIVER, NC

US 28759

Contact: BRANDON DRAKE

brandon.drake@ascendummachinery.com

T: 8(286)687-0620

F: (828)687-0622

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)